

Abstract of the Disclosure

An input or output switch port for a network switch converts each incoming packet into a cell sequence stores each cell in a cell memory. The switch port includes a traffic manager for queuing cells for departure from the cell memory and then signaling the cell memory to read out and forward cells in the order they are queued. The traffic manager selectively queues cells for departure on either a cell-by-cell or sequence-by-sequence basis. When cells are queued for departure on a cell-by-cell basis, cells of two or more sequences may be alternately read out and forwarded from the cell memory. Thus cells of different sequences may be interleaved with one another as they depart the cell memory. When a cell sequence is queued on a sequence-by-sequence basis all of its cells are read out of the cell memory and forwarded as a contiguous sequence and are not interleaved with cells of other sequences of the same departure queue. Each packet includes a flow identification number (FIN) value and the traffic manager determines from the packet's FIN whether to queue cell sequences derived from the packet on a cell-by-cell or sequence-by-sequence basis.

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